

## **REMARKS**

The Applicants have now had an opportunity to carefully consider the comments set forth in the Office Action mailed November 15, 2006. The consideration of, and the apparent acknowledgement of the persuasiveness of the Applicants' arguments set forth in Applicants' Response C, is noted with appreciation. However, all of the current rejections, including those based on new grounds, are respectfully traversed. Reexamination and reconsideration of the application in light of the following comments are respectfully requested.

### **The Office Action**

In the Office Action mailed November 15, 2006:

**claims 1-9 and 25-29** were rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,930,700 to Pepper, et al. ("Pepper") in view of U.S. Patent Application Publication No. 2002/0111153 A1 to Hartmaier, et al. ("Hartmaier");

**claims 10-18, 21-24 and 30** were rejected under 35 U.S.C. 103(a) as being unpatentable over Pepper in view of U.S. Patent No. No. 5,826,185 to Wise, et al. ("Wise"); and

**claims 19 and 20** were rejected under 35 U.S.C. 103(a) as being unpatentable over Pepper in view of Wise and further in view of U.S. Patent No. 6,745,025 B1 to Chow, et al. ("Chow").

### **The Present Application**

By way of brief review, the present application is directed toward systems and methods for screening calls on the basis of a priority assigned to the calling party and a current cost (monetary or opportunity) to a communications service subscriber. For example, a calling line identification or PIN is used to identify the calling party and to find a priority level assigned to the calling party by the subscriber. An applicable billing category is determined (e.g., a night or weekend, peak, or mobile-to-mobile billing category). Additionally, or alternatively, an unused amount of air time or message units in a basic allotment of message units or air time is determined. If, given the amount of remaining message units or the cost of message units, the priority level assigned to the calling party justifies call completion, user equipment of the calling party is connected to the user equipment of the subscriber. Otherwise, user equipment of the calling party is connected to a message service or call completion is denied (Abstract).

### The Cited References

In contrast, as stipulated by the Office Action, the primary reference of the Office Action to Pepper is directed to a system and method for automatically screening and directing incoming calls that does not include screening calls based on a current cost of message units.

It is respectfully submitted that the secondary references do not cure this deficiency of Pepper.

For example, the newly cited reference to Hartmaier allegedly discusses a prepaid subscriber account system for use with a wireless telephone system. The system monitors a subscriber's call, deducts the cost of the call from the subscriber's prepaid account in real time, warns the subscriber during a call when the account is near depletion and terminates the call when the account is depleted. The system can also prevent the initiation of a new call when the account is depleted (Abstract). However, contrary to the assertions of the Office Action, Hartmaier does not disclose or suggest screening calls based on a current cost of message units. Paragraph 72, cited by the Office Action, indicates that if the call monitoring module determines that the subscriber does not have a sufficient account balance to accept the incoming call, the call monitoring module can respond to the FAVAIL command with an actcode parameter that indicates 'block the call'. However, Hartmaier does not indicate how the call monitoring module determines whether or not the account has a sufficient account balance. For example, it is respectfully submitted that a sufficient account balance may be any balance greater than zero. Alternatively, a sufficient account balance may be any balance above some threshold balance such as, for example, 25 cents or 50 cents. Hartmaier simply does not disclose or suggest that a sufficient account balance is, or can be, a function of a current cost of message units or screening calls on the basis of a current cost of message units. It is respectfully submitted that any interpretation of Hartmaier as screening calls on the basis of current cost of message units is based on information gleaned solely from present application. Accordingly, the interpretation is based on impermissible hindsight.

Moreover, Hartmaier does not disclose or suggest screening calls on the basis of a current cost of air time in combination with information included in a list of potential calling parties and associated priorities, as recited, for example, in **claim 1** of the present application.

Wise allegedly discloses a cellular phone system in which a cellular phone user (CPU) has a cellular phone with a prepaid amount of available air time. The CPU prepays for a particular number of airtime units. When a cell site receives a call from the CPU, the cell site communicates with a mobile telecommunications switching office (MTSO), which recognizes a unique serial number from the cellular phone. The MTSO directs the call to a prepaid airtime transaction tracking interface (PATTI). The PATTI then checks whether the CPU's account has any available airtime units and may indicate the number of units to the CPU. If none, the PATTI does not answer the call; otherwise, the PATTI connects the call and deducts airtime units until the call is disconnected (Abstract). It is respectfully submitted that Wise does not disclose or suggest screening calls or screening calls on the basis of a current cost of message units.

The Office Action appears to rely on Wise for disclosure of screening calls comprising completing the requested call to a mobile device of the subscriber if the current ration state is unrestricted. However, the portions of Wise cited by the Office Action are, for the most part, directed to processing an outgoing call from a subscriber (i.e., CPU) and not screening calls incoming to the subscriber. An exception found by the Applicants occurs at column 3, lines 40-43, wherein it is explained that the MTSO is programmed, based on the CPU's choice, to block incoming calls or having the calling party pay. It is respectfully submitted that Wise does not disclose or suggest screening calls or making call screening decisions based on a current cost of message units.

Additionally, Wise does not disclose or suggest processing a call request received from a calling party directed at user equipment of a subscriber according to a current ration state and the priority level of the calling party, as recited, for example, in **claim 10** of the present application. The Office Action relies on the Abstract and portions of columns 1 and 2 of Wise for such disclosure. However, the cited portions of Wise discuss an outgoing call and not the screening of an incoming call, Wise does not include the subject matter for which it is relied, and Wise does not cure the deficiencies of Pepper.

Chow allegedly discloses time-of-day call forwarding in a wireless centrex services system. According to Chow, a wireless telephone subscriber can use a standard cellular/PCS telephone as a wireless extension of their desktop phone, while in the proximity of miniature radio base station capable of communicating with the PCS/cellular telephone. An alleged advantage of such a system is that a subscriber

can use the same cellular/PCS telephone that provides a service in the public network in the wireless centrex environment. Additionally, the wireless centrex system provides services and features which are similar to those offered to regular centrex telephone subscribers. Exemplary features include, caller ID, call waiting, call hold, call transfer, call forwarding and voice messaging (Abstract). The Office Action relies on Chow for disclosure of determining a current day of the week and a current time of day.

It is respectfully submitted that Chow does not disclose or suggest screening a call or making screening decisions based on a current cost of message units.

### The Claims are not Obvious

**Claims 1-9 and 25-29** were rejected under 35 U.S.C. 103(a) as being unpatentable over Pepper in view of Hartmaier.

In explaining the rejection of **claim 1**, the Office Action stipulates that Pepper fails to disclose screening calls based on a current cost of message units and relies on paragraphs 72 and 79-82 of Hartmaier for this disclosure. However, it is respectfully submitted that the cited portions of Hartmaier do not disclose or suggest screening calls on the basis of a current cost of message units. Moreover, the combination of Pepper and Hartmaier does not disclose or suggest screening calls based on at least one of a calling line identification and a personal identification code associated with the calls and based on information included in the list of potential calling parties, on the associated priorities and on current cost of message units as recited in **claim 1**.

Paragraph 72 of Hartmaier indicates that a call monitoring module determines whether or not a subscriber has a sufficient account balance to accept an incoming call. Hartmaier does not disclose or suggest that this determination is based on a current cost of message units. Paragraphs 79-82 discuss variations in per-minute charges for airtime usage, toll charges and the definition of the "local calling area." However, there is no suggestion that this information is used in the screening of calls. It is respectfully submitted that the rate information discussed in paragraphs 79-82 is used to calculate the running cost of a call as explained, for example, in paragraph 34 of Hartmaier. The call monitoring module calculates the running cost of the call and this running cost is deducted from the prepaid account balance. When the call is completed, the monitoring stops. If the cost for the call approach or exceed a threshold, then the call monitoring module causes the MSC to conference an IVR into the call path so that the IVR can play an appropriate warning message. The call monitoring module can also

instruct the MSC to terminate the call and the prepaid account balance drops below a preselected amount (paragraph 35).

For at least the foregoing reasons, Hartmaier does not include the subject matter for which it is relied. Accordingly, **claim 1**, as well as **claims 2-9**, which depend therefrom, is not anticipated and is not obvious in light of Pepper and Hartmaier taken alone or in any combination.

Additionally, it is respectfully submitted that the motivation to read into Hartmaier subject matter from the present application could only have been gleaned from the present application. Accordingly, the rejection of **claims 1-9** are based on impermissible hindsight and, again, **claim 1**, as well as **claims 2-9**, which depend therefrom, is not anticipated and is not obvious in light of Pepper and Hartmaier.

Regarding **claims 6-9**, and more particularly in an apparent reference to **claims 8** and **9**, the Office Action asserts that Hartmaier discloses wherein screening calls comprises: completing the requested call to a mobile device of the subscriber if the current ration state is unrestricted, requesting billing information regarding the subscriber from a billing system; wherein requesting billing information regarding the subscriber from a billing system comprises: requesting information regarding unused allocated air time from an allotment of air time in an air time allocation period associated with the subscriber and directs the attention of the Applicants to FIG. 6, steps 602-604 and paragraph 71 in support of the assertion.

However, paragraph 71 is silent with regard to air time. Paragraph 70 explains that in a call delivery process (paragraph 63), once it is established that the subscriber's telephone is turned on and has registered with a serving MSC, a CALL DELIVERY process starts when the MSC sends a facility selected and available (FAVAIL) command to the call monitoring module at step 602. Paragraph 71 further indicates that if the call monitoring module determines that the subscriber has a sufficient account balance to accept the call, it responds to the FAVAIL command at step 603 by returning an actcode parameter that indicates 'continue processing'. The serving MSC then sets up the call at step 604.

The remainder of paragraph 71 indicates that, when triggered, a call monitoring module starts a timer and begins monitoring the subscriber account balance and prepares to respond to an ORREQ command. When the parties hang up, the MSC detects this and sends an ORREQ command to the call monitoring module with a trigger-type parameter indicating 'disconnect'. The call monitoring module then stops

the call timer and the account balance monitoring at step 610.

It is respectfully submitted that FIG. 6, steps 602-604 and paragraph 71 are unrelated to call screening. Instead, it is respectfully submitted that steps 602-604 and paragraph 71 are directed toward activities that occur after a call has been established or has been connected. Furthermore, the cited portion of Hartmaier is silent with regard to air time. Hartmaier does not disclose or suggest that the balance in the subscriber account is a balance of air time. It is respectfully submitted that a suggestion that the balance discussed by Hartmaier is an air time balance could only have been gleaned from the present application. Accordingly, the rejection of **claim 8** is based on impermissible hindsight.

With apparent reference to **claim 9**, the Office Action asserts that Hartmaier discloses the subject matter of **claim 9** and directs the attention of the Applicants to paragraphs 79-82. However, while the cited portion of Hartmaier discusses access fees and per-minute charges as well as toll charges and aspects related to "local calling area," that discussion is presented in the context of call monitoring and is unrelated to call screening. Accordingly, Hartmaier does not disclose or suggest requesting information regarding a current cost to the subscriber of air time as part of a call screening process as is recited in **claims 1, 7 and 9**. Any suggestion to the contrary could only have been gleaned from the present application and is, therefore, based on impermissible hindsight reasoning.

For at least the foregoing additional reasons, **claims 7, 8 and 9** are not anticipated and are not obvious in light of Pepper and Hartmaier.

The arguments and citations presented with regard to **claim 25** are similar to those presented in the explanation of **claim 1**. In this regard, arguments similar to those submitted in support of **claim 1** are submitted in support of **claim 25**.

For example, the assertion that paragraphs 72 and 79-82 of Hartmaier disclose a system operative to conserve message units for a subscriber comprising determining a current message unit ration state based on a current cost of message units to the subscriber and processing call requests based on determined current message unit ration states is respectfully traversed. Hartmaier is unconcerned with conserving message units. Instead, Hartmaier allows all calls as long as the subscriber's account balance is sufficient. Hartmaier is silent with regard to message units. Hartmaier discusses determining a cost of air time. However, Hartmaier does not disclose or suggest determining a cost of air time for the purpose of screening calls. Instead,

Hartmaier determines the cost of air time in order to deduct the appropriate amount from a subscriber's account. As explained in paragraph 72, the call monitoring module issues a command to block a call only when the subscriber's account balance is insufficient to cover the cost of connecting the call. Accordingly, even if the account balance of the subscriber of Hartmaier were an account balance of message units (which is disputed), Hartmaier does not disclose or suggest conserving those message units. At the point that Hartmaier begins blocking calls, it is respectfully submitted that there would be no message units left to conserve.

Accordingly, Hartmaier does not disclose or suggest the subject matter for which it is relied and the Office has not met its burden for presenting a case of *prima facie* obviousness. For at least the foregoing reasons, **claim 25**, as well as **claims 26-29**, which depend therefrom, is not anticipated and is not obvious in light of Pepper and Hartmaier.

With regard to **claims 26-29**, the Office Action directs the attention of the Applicants to paragraphs 61-62 and 71 of Hartmaier and asserts that the combination of Pepper and Hartmaier discloses the subject matter of **claims 26-29**.

However, the cited portions of Hartmaier are not related to screening calls, and the Office Action does not explain how the cited subject matter from Hartmaier would be combined with subject matter from Pepper. Accordingly, it is respectfully submitted that the Office has not met its burden for presenting a case of *prima facia* obviousness, and **claims 26-29** are not anticipated and are not obvious in light of Pepper and Hartmaier.

Furthermore, paragraphs 61 and 62 discuss monitoring an account balance during the course of a call and are unrelated to screening a call. It is respectfully submitted that discussion of ending a call because a subscriber's account no longer includes sufficient funds to pay for continuing the call does not disclose or suggest managing air time or conserving air time or screening calls on the basis of a priority level of a caller and a current cost of air time or ration state. Furthermore, it is respectfully submitted that combining disclosure of call screening according to the method of Pepper with prepaid account monitoring of Hartmaier does not even disclose or suggest screening calls on the basis of a monitored account balance. It is respectfully submitted that such a suggestion could only have been gleaned from a review of the present application. Accordingly, the rejection of **claims 26-29** are based on impermissible hindsight reasoning and **claims 26-29** are not anticipated and are not obvious in light of Pepper and Hartmaier.

**Claims 10-18, 21-24 and 30** were rejected under 35 U.S.C. 103(a) as being unpatentable over Pepper in view of Wise.

In explaining the rejections of **claims 10 and 30**, the Office Action stipulates that Pepper fails to disclose a method of managing air time comprising determining a current air time ration state associated with the subscriber and processing the call request according to the current ration state and relies on column 1, line 61 - column 2, line 10, of Wise for this disclosure.

However, the cited portion of Wise is only concerned with whether or not there is any air time minutes available in the prepaid account of a cellular phone user or if the account has expired. It is respectfully submitted that if the account has expired or if there are no air time minutes available in the account, there can be no air time to ration. Accordingly, under these circumstances, Wise does not disclose or suggest managing air time or determining an air time ration state. If there is air time credited to the account of the cellular phone user of Wise, then, as explained in the cited portion of columns 1 and 2, the cellular phone user is allowed to place an outgoing call. Accordingly, under this circumstance, Wise does not disclose or suggest managing air time or processing a call request according to a current ration state.

Moreover, **claim 10** recites *inter alia*: processing the call request according to the current ration state and the priority level of the calling party. It is respectfully submitted that there is no motivation in Pepper and Wise or the art as a whole, other than that which can be gleaned from the present application, for processing a call according to a combined consideration of both a priority of a calling party and a current cost of air time as recited in **claim 10**. Accordingly, the rejection of **claim 10** is based on impermissible hindsight reasoning, and the Office has not met its burden for presenting a *prima facia* case of obviousness. Similar comments are applicable to the respective --means for--language of **claim 30**.

For at least the foregoing reasons, **claim 10**, as well as **claims 11-24**, which depend therefrom, and **claim 30** are not anticipated and are not obvious in light of Pepper and Wise.

Additionally, regarding **claims 13 and 14**, the Office Action relies on and cites various portions of Pepper. However, **claims 13 and 14** recite determining a priority level associated with the calling party comprises *inter alia*: determining a calling line identification associated with the calling party and receiving a personal identification code from the calling party, respectively.

It is respectfully submitted that even if the cited portions of Pepper could be construed as disclosing determining a calling line identification associated with the calling party, the cited portions of Pepper do not disclose or suggest receiving a personal identification code from the calling party. Instead, as an alternative to automatic number identification, Pepper suggests “speaker identification” (column 6, lines 23-24; column 10, lines 51-53; column 12, line 9). It is respectfully submitted that disclosure of using a speaker identification system does not disclose or suggest receiving a personal identification code.

With regard to **claim 15**, the Office Action simply asserts that Pepper and Wise disclose the subject matter of **claim 10** and the subject matter of **claim 15** and directs the attention of the Applicants to FIGS. 2E and 2F and portions of columns 4 and 5. However, **claim 15** recites *inter alia*: determining a remaining air time allocation period fraction, determining a remaining air time allocation fraction, determining a remaining air time allocation period to air time allocation fraction ratio and determining a current air time ration state based on the air time allocation period to air time allocation fraction ratio. It is respectfully submitted that Wise does not disclose or suggest determining either of the fractions recited in **claim 15** or the ratio recited in **claim 15**. Clarification is respectfully requested.

Furthermore, FIG. 2E illustrates the real time function, the system monitoring the duration of the call and then determining which billing formula the CPU should be charged as a local, long distance or international, the billing rate selection being dependent on where the call is directed (column 4, lines 26-32, cited by the Office Action). Accordingly, FIG. 2E is related to processing related to an outgoing call and not to call screening. FIG. 2F illustrates the hang-up function, the system checking to see if the call duration is less than 59 seconds (column 4, lines 45-48, cited by the Office Action). Accordingly, FIG. 2F is related to processing that occurs after a call has ended and is not related to call screening.

With regard to **claims 16, 18 and 21**, the Office Action stipulates that Pepper fails to disclose certain aspects of those claims and relies on Wise to cure these deficiencies. However, in an apparent reference to **claim 16**, the Office Action directs the attention of the Applicants to portions of columns 1 and 2 and to portions of columns 3 and 4. However, **claims 16, 18 and 21** depend ultimately from **claim 10**, and **claim 10** recites aspects related to screening an incoming call (e.g., receiving a call request from a calling party, determining a priority level associated with the calling party,

etc.). The cited portion of columns 1 and 2 of Wise discuss aspects related to an outgoing call (e.g., column 1, lines 53-60). Furthermore, Wise does not disclose or suggest rationing air time or a current air time ration state. If any air time is available in the account of the CPU, the CPU is allowed to make an outgoing call. If there is no air time available, there is no air time to ration and the CPU is not allowed to place a call (column 1, line 57 - column 2, line 10). Similar comments are applicable to the cited portions of columns 3 and 4 with the single exception that column 3, lines 40-43, discusses either blocking incoming calls or having the calling party pay for the incoming call. Accordingly, it is respectfully submitted that Wise does not disclose or suggest screening calls or calculating a current air time ration state for screening calls based on a function of remaining allocated air time.

In an apparent reference to **claim 18**, the Office Action asserts that Wise discloses the subject matter of **claim 18** and again directs the attention of the Applicants to the portions of columns 1-4 previously discussed. However, the Applicants respectfully disagree. For example, the cited portions of column 1-4 do not disclose or suggest determining a current time associated with a subscriber or determining a current air time ration state as a function of the remaining air time allocation or determining a remaining air time allocation associated with the current time as recited in **claim 18**.

In an apparent reference to **claim 21**, the Office Action directs the attention of the Applicants to column 2, lines 10-20 (apparently of Wise), and asserts *inter alia*: that Wise discloses connecting the calling party to a message service if the current ration state is at a maximum restriction. However, the cited portion is silent with regard to connecting a calling party to a message service. The cited portion of column 2 does not disclose or suggest a message service. Instead, the cited portion is a continuation of a description of a process for a subscriber placing an outgoing call in the system of Wise. The prepaid air time transaction tracking interface (PATTI) plays a tone which indicates to the cellular phone user that the desired phone number may be entered. If the number is valid, PATTI seizes an outside telephone line and connects the cellular phone user immediately. If the telephone number being called is invalid, PATTI disconnects and hangs up on the cellular phone user (CPU) (column 1, lines 65-66; column 2, lines 10-20).

Accordingly, with regard to the rejection of **claim 21**, Wise does not include the subject matter for which it is relied.

Regarding **claim 17**, the Office Action relies on Wise and asserts that Wise discloses determining the current air time ration state associated with the subscriber comprises calculating the current air time ration state based on a current subscriber cost of air time and directs the attention of the Applicants to FIG. 2E. However, as explained above, FIG. 2E illustrates the system monitoring the duration of a call and then determining which billing formula the CPU should be charged. It is respectfully submitted that discussion of determining a charge for a call based on the duration of the call does not disclose or suggest determining a ration state for taking actions to ration air time for the purposes of screening incoming calls.

Accordingly, Wise does not include the subject matter for which it is relied, and **claim 17** is not anticipated and is not obvious in view of Pepper and Wise.

With regard to **claims 22-24**, the Office Action stipulates that Pepper fails to disclose determining the current air time ration state associated with the subscriber comprises the elements of **claims 22-24** and relies on Wise for this disclosure. However, it is respectfully submitted that the cited portions do not disclose or suggest the subject matter for which they are relied. Even if FIG. 2E suggests requesting billing information regarding the subscriber from a billing system, FIG. 2E does not disclose or suggest requesting that information as part of process for determining the current air time ration state associated with a subscriber. Instead, FIG. 2E illustrates the real time function, the system monitoring the duration of a call and then determining which billing formula should be used to charge the CPU (cellular phone user) (column 4, lines 26-30).

Even if column 1, line 50 - column 2, line 10, discloses requesting information regarding unused allocated air time from an allotment of air time in an air time allocation period associated with the subscriber, Wise does not disclose or suggest doing so in order to determine a current air time ration state associated with the subscriber. Instead, the cited portion of Wise discloses determining if any air time is available and, if so, allowing a cell phone user to place an outgoing call. Wise does not disclose or suggest rationing air time. If air time is available, Wise allows calls to be connected. If no air time is available, Wise blocks call completion.

Even if column 5, line 61 - column 6, line 9, discloses requesting information regarding a current cost the subscriber of air time, Wise does not disclose or suggest doing so to determine a current air time ration state associated with a subscriber.

For at least the foregoing additional reasons, **claims 14-18 and 21-24** are not anticipated and are not obvious in light of Pepper and Wise.

**Claims 19 and 20** were rejected under 35 U.S.C. 103(a) as being unpatentable over Pepper in view of Wise and further in view of Chow.

However, **claims 19 and 20** depend from **claim 18**, which depends from **claim 10**. In this regard, arguments similar to those submitted in support of **claims 10 and 18** are submitted in support of **claims 19 and 20**. Additionally, even if the three references can be combined, the mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination (MPEP 2143.01 (III)). It is respectfully submitted that the only motivation to combine Pepper, Wise and Chow is that which can be gleaned from the present application. Therefore, it is respectfully submitted that the rejection of **claims 19 and 20** are based on impermissible hindsight.

For at least the foregoing additional reasons, **claims 19 and 20** are not anticipated and are not obvious in light of Pepper, Wise and Chow taken alone or in any combination.

**Telephone Interview**

In the interests of advancing this application to issue the Applicant(s) respectfully request that the Examiner telephone the undersigned to discuss the foregoing or any suggestions that the Examiner may have to place the case in condition for allowance.

## CONCLUSION

**Claims 1-30** remain in the application.

For at least the foregoing reasons, it is respectfully submitted that the application is in condition for allowance. Accordingly, an early indication thereof is respectfully requested.

Respectfully submitted,

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February 15, 2007

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